

Title (en)
INTERCOOLED COOLING AIR USING EXISTING HEAT EXCHANGER

Title (de)
ZWISCHENGEKÜHLTE KÜHLLUFT UNTER VERWENDUNG EINES BESTEHENDEN WÄRMETAUSCHERS

Title (fr)
AIR DE REFROIDISSEMENT REFROIDI PAR ÉCHANGEUR DE CHALEUR EXISTANT

Publication
EP 3121411 A1 20170125 (EN)

Application
EP 16180657 A 20160721

Priority
US 201514804534 A 20150721

Abstract (en)
A gas turbine engine comprises a main compressor section having a high pressure compressor with a downstream discharge, and more upstream locations. A turbine section has a high pressure turbine. A tap taps air from at least one of the more upstream locations in the compressor section, passing the tapped air through a heat exchanger and then to a cooling compressor. The cooling compressor compresses air downstream of the heat exchanger, and delivers air into the high pressure turbine. The heat exchanger also receives air to be delivered to an aircraft cabin. An intercooling system for a gas turbine engine is also disclosed.

IPC 8 full level
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CPC (source: EP)
F02C 6/08 (2013.01); **F02C 7/185** (2013.01); **F02C 9/18** (2013.01); **F05D 2220/3219** (2013.01); **F05D 2260/211** (2013.01); **F05D 2260/213** (2013.01); **Y02T 50/60** (2013.01)

Citation (search report)

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Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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